

Mercury in fish: a special advisory for women of childbearing age* and children under 15

The federal government recently made its guidelines for mercury intake more stringent, based on a study conducted in the Indian Ocean community of the Seychelles Islands.

The provincial Minister of the Environment is therefore taking action to change Ontario's consumption advice for mercury in sport fish to be more protective of two groups of sensitive individuals: women of childbearing age and children under the age of 15.

Important change in advice

The Ministry of the Environment (MOE) advises women of childbearing age and children under 15 to eat only those fish currently represented in the 1997-98 Guide to Eating Ontario Sport Fish by the clear fish symbol and to consume no more than four meals per month of these fish. All other categories of fish caught in Ontario should not be consumed by these sensitive individuals.

These are interim changes until the next Guide is released in March 1999 and do not apply to the remainder of the population.

In calculating the amount of mercury that can be consumed, Health Canada is extremely cautious. It imposes a safety factor on top of the levels recommended as safe in studies and is very cautious in developing tolerable daily intake (TDI) guidelines. When MOE uses these guidelines to establish the recommended amount of sport fish that can be consumed, it also builds a safety factor into its advice.

The change in Health Canada's guidelines for mercury consumption results from the preliminary findings of a recent epidemiological study in the Seychelles, where the population eats a lot of fish. The study, on the effects of mercury exposure from a high-fish diet on child development in the Seychelles, detected a decreased activity level in two-year-old boys whose mothers had eaten mercury-contaminated fish during pregnancy.

Don't stop eating fish!

Fish are an excellent source of protein and low in saturated fat. Some fish, however, may contain harmful contaminants. So be sure to follow the advice given in the *Guide*, and in this fact sheet, to ensure you are eating fish that are safe for you.

How to tell if fish are safe to eat

Health Canada regularly reviews the TDIs for various environmental contaminants that may be inadvertently found in food. In Ontario, these TDIs are used to determine if sport fish are safe to eat and the advice is distributed through the *Guide*.

Contaminants in fish

Contaminants such as mercury, toxaphene, dioxins, furans, mirex and polychlorinated biphenyls (PCBs) can accumulate in fish and could be harmful to a developing fetus, young child or breast-feeding baby.

Mercury is a naturally occurring metal that is found in very low levels in air, water, rocks,

Ontario's Ministry of the Environment has revised its sport fish consumption advisory to reflect changes in the tolerable daily intake (TDI) set by Health Canada for mercury. The more stringent limit applies only to women of childbearing age and children under 15.

* Women of childbearing age are defined in the *Guide to Eating Ontario Sport Fish* as women who are pregnant, intending to become pregnant or are breast-feeding mothers.

soil, plant and animal matter. It has also been used by industry and can be released as a byproduct of incineration. Mercury can travel long distances through the atmosphere from sources such as coal-burning power plants, and enter rivers and lakes through rainfall and snowmelt. This is how some fish in remote lakes and rivers, having no apparent source of contamination, can be affected.

In high amounts, mercury damages the nervous system and can cause severe mental and physical retardation in a baby. Studies suggest that lower amounts can delay walking and talking and can cause learning problems.

Reducing your exposure to contaminants

Follow the advice in this fact sheet and consult the *Guide* to determine the safety of the fish you plan to eat.

Fish build up contaminants from the water they live in and the food they eat. Larger fish are usually older and have had more time to build up contaminants. Fish such as walleye and northern pike, which eat other fish, tend to have higher levels of mercury.

Mercury cannot be removed from fish and is uniformly distributed in the flesh. However, the way you clean and cook fish can alter the amount of other contaminants you ingest. The *Guide* provides details.

Store-bought fish

Fish purchased at the retail level are subject to ongoing testing for contaminants to ensure they meet Canadian standards. The Canadian Food Inspection Agency, Health Canada and the Ontario Ministry of Natural Resources are the responsible regulatory agencies. MOE consulted all these groups recently, before revising the guidelines.

However, if you consume commercial fish regularly (once per week or more often), it may be advisable for you to reduce your consumption of sport fish. Furthermore, Health Canada has stated that women of

childbearing age and children should not consume more than one or two meals of shark, swordfish or fresh tuna (not canned tuna) per month as these fish are known to contain higher levels of mercury. Women of childbearing age and children under 15 who are regular consumers of shark, swordfish or fresh tuna are advised not to consume sport fish as well.

If in doubt, please contact your primary health-care professional or:

Sport Fish Contaminant Monitoring Program
Ministry of the Environment
125 Resources Rd.
Etobicoke ON
M9P 3V6
Tel: (416) 235-6220
Fax: (416) 235-6235
Toll-free number: 1-800-820-2716

Health Canada
Tel: (613) 957-2991
Internet: www.hc-sc.gc.ca

Canadian Food Inspection Agency
Tel: (905) 795-9666

To obtain a copy of the *Guide to Eating Ontario Sport Fish* please contact:

Public Information Centre
135 St. Clair Ave. W.
Toronto ON
M4V 1P5
Tel: (416) 325-4000
Fax: (416) 325-3159
Toll-free number: 1-800-565-4923
Internet: www.ene.gov.on.ca

